

AMENDMENT UNDER 37 C.F.R. § 1.116  
U.S. Appln. No. 08/960,224

**REMARKS**

Claims 1-15 are all the claims pending in the application.

The Examiner indicates that claim 3-15 have been **allowed**. However, the Examiner maintains the rejections of claims 1 and 2 under 35 U.S.C. §103(a) as being unpatentable over Oh-e et al. (Oh-e) in view of Shimizu et al. (Shimizu).

The Examiner alleges that in a liquid crystal panel structured as shown in Shimizu's Fig. 1, coloring would be controlled in a case of an oblique view as well as the front view. Furthermore, the Examiner alleges that it would have been "conventional" to have a color filter which passes 70% or more of the light, and therefore, it would have been obvious to increase the thickness of the liquid crystal layer as required in Applicants' dependent claim 2 (see final Office Action, page 3).

Applicants respectfully disagree. However, in order more clearly to define the novel and unobvious features of the embodiment of Applicants' invention as claimed in independent claim 1, Applicants amend claim 1 even more particularly to recite how the structure set forth therein achieves the advantages of this embodiment of the invention. Clearly, a skilled artisan would appreciate that various equivalent structures for applying different driving voltages to the pixel electrodes may be employed without departing from the scope of the embodiment of Applicants' invention as defined in the amended claim 1.

As explained in Applicants' Amendment filed April 1, 2001, one of the features of the embodiment of Applicants' invention as claimed in claim 1, is changing the thickness of the liquid crystal layer in each color layer in order to efficiently control coloring when viewing is

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from an oblique direction in the IPS mode liquid crystal display element having a wide view angle.

Shimizu and Oh-e do not disclose, teach or suggest coloring in the case of an oblique view. The coloring issues was not perceived at all by Shimizu, instead Shimizu focussed on addressing other problems which lower the quality of the picture, such as instantly gray scale or dimming from black in TN mode. That is, in TN mode, coloring in the case of an oblique view has never been perceived as an essential problem, therefore no plan for resolution to such a problem is taught or suggested by the cited prior art.

Unlike the prior art, in the embodiment of Applicants' invention as claimed in claim 1, the thickness of the liquid crystal layer is varied as a way of solving the coloring problem in the oblique view. Therefore, the prior art references, including Shimizu and Oh-e do, do not teach or suggest the structure for an active matrix liquid crystal display panel as claimed in Applicants' independent claim 1, "whereby an appearance of white color is gained by applying different driving voltages to the pixel electrodes, depending upon the different thickness of the crystal layers in each of the color layers" (*Id.*).

Accordingly, Applicants' independent claim 1, as well as its dependent claim 2 (which incorporates all the novel and unobvious features of its base claim 1), would not have been obvious from any reasonable combination of Shimizu and Oh-e.

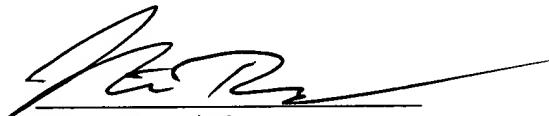
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

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Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this case, and any required fee, except for the Issue Fee, for such extension is to be charged to Deposit Account No. 19-4880.

Respectfully submitted,



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**APPENDIX**  
**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**IN THE CLAIMS:**

The claims are amended as follows:

1. (Twice Amended) An active matrix liquid crystal display panel, comprising:
  - a first substrate on which a plurality of color layers having transmission wavelengths different from each other are provided in parallel to each other;
  - a second substrate disposed in an opposing relationship to said first substrate with a predetermined clearance left from said first substrate for generating a predetermined electric field when a predetermined voltage is applied; and
  - a liquid crystal layer formed from liquid crystal injected in a gap defined by a surface of said first substrate adjacent said second substrate and a surface of said second substrate adjacent said first substrate;
  - the electric field generated by said second substrate being substantially parallel to said liquid crystal layer to control a display;
  - said liquid crystal layer having a thickness which varies depending upon the transmission wavelengths of said color layers, whereby coloring is controlled in a case of an oblique view with respect to said first substrate and said second substrate,

wherein said second substrate comprises:

a plurality of pixel electrodes provided corresponding to said color layers, the predetermined voltage being applied to said pixel electrodes; and

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a plurality of opposing electrodes provided in parallel to said pixel electrodes for each of said color layers for cooperating, when the voltage is applied to said pixel electrodes, with said pixel electrodes to generate the electric field therebetween,

whereby an appearance of white color is gained by applying different driving voltages to the pixel electrodes, depending upon the different thickness of the crystal layers in each of the color layers.